<u>**REMARKS**</u>

Claims 1-46 are currently pending in the subject application, and claims 1-33 are presently under consideration. Claims 1, 4, 8, 9, 13-15, 18, 19, 21, 24, and 25 have been amended as shown on pages 8-13 of the Reply. Claims 34-46 have been withdrawn, as stated *infra*. In addition, the specification has been amended as indicated on pages 2-7. No new matter has been added.

Applicants' representative hereby affirms the election with traverse of Species I (recited in claims 1-33) for further prosecution on the merits. Accordingly, claims 34-46 have been withdrawn. Applicants' representative reserves the right to rejoin these withdrawn claims at a later date, or pursue the non-elected claims in a division application.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.   Objection of Claims 2-23 and 25-33

Claims 2-23 and 25-33 are objected to as the Examiner contends that it is unclear how the limitations of dependent claims are incorporated into independent claims. Withdrawal of this objection is requested for at least the following reason. The subject claims clearly state how their respective limitations interrelate to and can be incorporated into their respective independent claims.

For example, claim 2 recites: the system of claim 1, *the data* is generated from relational database schema information. Claim 2 clearly states that it depends from claim 1. Claim 1 recites: a declarative description component that generates a file and facilitates generating *data* in a declarative format. It is clear that the data referred to in claim 2 is the data specified in claim 1. It is therefore clear as to how the limitation of claim 2 interrelates with, and can be incorporated into, claim 1.

In view of at least the foregoing, withdrawal of the objection as to the subject claims is respectfully requested.

II.   Rejection of Claims 1-33 Under 35 U.S.C. § 101

Claims 1-33 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject. It is requested that this rejection be withdrawn for at least the following reason. The subject claims produce a useful, concrete, and tangible result and are therefore within the bounds of statutory subject matter, in accordance with 35 U.S.C. § 101.

> [Where] the claimed process applies the Boolean principle [abstract idea] *to produce a useful, concrete, tangible result* … on its face the claimed process comfortably falls within the scope of § 101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed. Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been *reduced to some practical application rendering it "useful."* *AT&T*, 172 F.3d at 1357 *citing In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

For example, claim 1, as amended, recites: a system that facilitates representing a relational database in a different format, comprising a declarative description component that *generates a file and facilitates generating data in an implementation-neutral, declarative format* based upon an eXtensible Markup Language (XML) syntax *that represents the relational database, the data is stored in the file*.

The claimed subject matter can represent a relational database by generating data in a declarative format based upon an XML syntax that represents the relational database and storing the generated data in a file. The claimed subject matter can thereby facilitate mapping to various data models and provide flexibility in utilizing the data to allow the

database to be reconstructed in a remote setting, as the file can be used when remote and disconnected from the relational database. (*See* p. 2, lns. 10-13; and p. 4, ln. 19 – p. 5, ln. 2). Thus, the claimed subject matter produces a useful, concrete, and tangible result – the claimed subject matter *generates a file and facilitates generating data in an implementation-neutral, declarative format* based upon an eXtensible Markup Language (XML) syntax *that represents the relational database*, and *the data is stored in the file*.

In view of at least the foregoing, the subject claims are properly limited to statutory subject matter in accordance with 35 U.S.C. § 101. Therefore, it is believed that the subject claims are in condition for allowance, and withdrawal of this rejection is respectfully requested.

III. Rejection of Claims 1-33 Under 35 U.S.C. § 102(b)

Claims 1-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wetherbee (US 5,937,409). It is requested that this rejection be withdrawn for at least the following reasons. Wetherbee does not disclose each and every element of the subject claims.

> For a prior art reference to anticipate, 35 U.S.C. § 102 requires that "*each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)) (emphasis added).

Applicants' claimed invention relates to representing relational schemas in an alternative declarative format. An aspect of the claimed subject matter can include a declarative descriptive component that can represent any relational schema by generating data in an implementation-neutral, declarative format, for example, an eXtensible Markup Language (XML) format utilizing XML syntax. The declarative descriptive component can utilize a tool to extract metadata of the relational database, and to format the metadata into a file that can represent the precise data and structure of the database, such that the corresponding database can be reconstructed when remote and disconnected

from the relational database. The file can also contain information on the database type system, as well as the routines (*e.g.*, functions and procedures) that are exposed by the database. Thus, the claimed subject matter provides the capability of allowing a user to work with a representative structure of a relational database even though remote and disconnected therefrom.

Further, the claimed subject matter can utilize a classification component that can employ a probabilistic-based and/or statistical-based analysis to infer actions and/or automated functions to be automatically performed. For example, one such automated function can be automatically annotating physical information representative of the relational database to generate logical information associated with the relational database.

In particular, independent claim 1 (and similarly independent claim 24), as amended, recites: *a declarative description component that generates a file and facilitates generating data in an implementation-neutral, declarative format based upon an eXtensible Markup Language (XML) syntax that represents the relational database*. Wetherbee does not disclose this distinctive feature of the claimed subject matter.

Rather, Wetherbee discloses a relational mapper that maps tables of a relational database to expose such tables as class objects in an object oriented system. (*See* col. 5, lns. 19-21). To map data from a table in a relational database, the relational mapper utilizes the table's metadata to create class type and interface definitions. (*See* col. 9, ln. 67 – col. 10, ln. 2). The relational mapper generates metadata to describe the newly created class type/interface definitions. (*See* col. 10, lns. 2-4). Objects that are instantiated from the class type, supported by the default interfaces, and populated with data from a table of the relational database, can be full fledged objects of the object oriented system. (*See* col. 10, lns. 4-8).

However, unlike the claimed invention, Wetherbee is silent regarding generating data *in an implementation-neutral, declarative format based upon an XML syntax that represents the relational database*. Instead, Wetherbee discloses utilizing metadata to create class type and interface definitions, and describe the newly created class type/interface definitions. Further, Wetherbee discloses that an object of an object oriented system can be instantiated in part with data from a table of the relational

database. However, Wetherbee fails to disclose generating data in an implementation-neutral, declarative format based upon an XML syntax.

In contrast, the claimed invention can completely represent a relational database utilizing a declarative description component that facilitates *generating data in an implementation-neutral, declarative format based upon an XML syntax that represents the relational database*.

Further, claim 18 additionally recites: *a classification component employs at least one of a probabilistic-based analysis or statistical-based analysis to infer that an automated function be automatically performed*. Wetherbee also fails to disclose this distinctive feature.

Unlike the claimed subject matter, Wetherbee is silent regarding a classification component, as claimed. Rather, Wetherbee discloses an automated process performed in software to automatically generate mapping objects. (*See* col. 18, lns. 57-59). The auto mapper is configured to generate mapping objects and relational objects in accordance with a *predetermined set of rules*. (*See* col. 18, lns. 64-66). However, Wetherbee fails to disclose utilizing *probability-based or statistical-based analysis* to determine whether an automated function should be automatically performed.

In contrast, the claimed subject matter can utilize a classification component that employs a *probabilistic-based or statistical-based analysis to infer* that an automated function, such as deriving annotation information relating to logical information associated with a relational database, be automatically performed.

Moreover, independent claim 24 additionally recites: a declarative description component that receives the relational schema in the form of at least metadata and *generates a data file in a non-procedural declarative language format based upon an eXtensible Markup Language (XML) syntax* representative of a logical view thereof. Wetherbee does not disclose this distinctive feature of the claimed subject matter.

Rather, Wetherbee discloses a relational mapper that maps tables of the relational database, utilizing the table's metadata, to expose these tables as class objects in an object oriented system. (*See* col. 5, lns. 19-21; col. 9, ln. 67 – col. 10, ln. 2). Unlike the claimed subject matter, Wetherbee is silent regarding receiving a relational database's relational schema in the form of metadata and *generating a data file in a non-procedural*

declarative language format based upon an XML syntax representative of a logical view thereof. Wetherbee fails to disclose generating a data file that represents the logical view of the relational schema of the relational database, let alone such a data file that is in a non-procedural declarative language format based upon an XML syntax.

In contrast, the claimed subject matter can represent a relational database by receiving its relational schema in the form of metadata, and then *generating a data file in a non-procedural declarative language format based upon an XML syntax* that represents a logical view of the relational database.

In view of at least the foregoing, it is readily apparent that Wetherbee fails to disclose each and every element of the claimed subject matter as recited in independent claims 1 and 24 (and associated dependent claims 2-23 and 25-33). Accordingly, it is believed that the subject claims are in condition for allowance, and the rejection should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063[MSFTP449US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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